GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

STARRED QUESTION NO:448
ANSWERED ON:05.04.2017
FIST Programme
Chavan Shri Ashok Shankarrao;Gaikwad Dr. Sunil Baliram

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) the salient features of the "Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)" programme;

(b) whether his Ministry has provided funds for this programme and if so, the details thereof;

(c) the details of the infrastructure support provided to educational institutions in the country;

(d) the universities, departments and institutions identified for implementation of FIST programme and the expenditure likely to be incurred for this purpose; and

(e) the other steps taken/being taken by the Government for promoting Research and Development activities in new and emerging areas and attracting fresh talent in universities and other educational institutions in the country?

Answer

MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND EARTH SCIENCES
(DR. HARSH VARDHAN)

(a) to (e): A statement is laid on the Table of the House.

STATEMENT AS REFERRED IN REPLY TO PARTS (a) TO (e) OF LOK SABHA STARRED QUESTION NO.448 FOR 05/04/2017 REGARDING FIST PROGRAMME

(a) Fund for improvement of S&T infrastructure in Universities and Higher Educational Institutions (FIST) Programme of the Department of Science and Technology (DST) enables Universities and Academic Institutions for pursuing competitive research and development (R&D) in new and emerging areas and attracts fresh talent towards R&D in the country. The salient features of the Programme are: Support for basic equipment, optimal infrastructure facilities, ready access to information system, maintenance of equipment, networking, databases & scientific journals and also computational facilities; Covers all sectors of Science & Technology Departments including Agriculture, Veterinary, Pharmacy and Medical having Post-graduate teaching & research program of 3 years in existence and Provides three levels of support to Universities, Post-Graduate Colleges and Institutions identified through Subject Expert Committees and FIST Advisory Board (FISTAB) which is comprised of eminent scientists and technologists.

(b) Yes, Madam. The funds provided by the Ministry in the last three years for FIST Programme are Rs. 227.74 crore, Rs. 221.97 crore and Rs. 232.72 crore in 2014-15, 2015-16 and 2016-17 respectively.

(c) The infrastructure support provided to educational institutions in the country includes− Support for basic and state-of-the-art equipment, infrastructure support like renovation of labs [e-classroom for PG Colleges] and books, networking/ Computational support and Maintenance of Equipment & Networking items. Some of equipment supported through the Programme include Ion Chromatograph, DNA Sequencers, Scanning Probe Microscope, Oligonucleotide Synthesizer, Molecular Imaging System, High Resolution Powder / Single crystal X-ray Diffractometer, NMR, Mass Spectrometer, Plasma Deposition Etching System, Universal Testing Machines (UTMs), Electron Microprobe Analyzer, High Resolution Microscopes, Confocal Microscope, Field Emission Scanning Electron Microscope, High Resolution Transmission Electron Microscope, Scanning Tunneling Microscope, Vacuum Melting Furnace, High Resolution Mass Spectrometer etc.

(d) Since inception, 2545 Departments including 346 PG Colleges have received FIST support at a total budget of about Rs 2320 crore. The institutions which received FIST support include Central Universities, State and Private Universities, Deemed Universities, Post graduate Colleges, Indian Institutes of Technology (IITs), Indian Institutes of Science Education and Research (IISERs), Indian Institute of Science, National Institutes of Technology (NITs) etc. The expenditure in the current year is likely to be Rs 233.0 crore.

(e) Government has taken several steps for promoting R&D activities in new and emerging areas in universities and other educational institutions in the country. This includes successive increase in plan allocations for Scientific Departments, setting up of Science and Engineering Research Board for basic research, offering attractive research fellowships, instituting women scientist schemes including support to women universities, special window support for R&D in thematic areas through Nano Mission, Solar Energy Research Initiative, Water Technology Initiative, Clean Energy Initiative, National Supercomputing Mission etc. New and emerging

areas like Big Data, Cyber Physical Systems, Advanced Manufacturing, Waste Processing have been identified as futuristic platforms and special thrust has been given for initiation of R&D. Special measures have been taken to attract and nurture fresh talent for undertaking R&D in the country. Some of the targeted Programmes include Young Scientist Project Award Schemes, Early Career Research Award (ECRA), National Postdoctoral Fellowship (N-PDF), Innovation in Science Pursuit for Inspired Research (INSPIRE) Faculty & Fellowship Schemes, PM Doctoral Fellowships, CSIR-Nehru Postdoctoral Fellowships etc. Extramural Funding Schemes of the Ministry enhance the research capability of the Universities and Institutions and provide a platform for training of young research personnel like Project Associates, Research Associates, Project Assistants. Awards like Innovative Biotechnologist Award, National Bioscience Awards for Career Development are given to Young scientists to attract innovative thinkers in sectoral areas. Researchers, especially young scientists have been supported to engage in international collaborations with prominent countries thereby ensuring that the research undertaken in universities and other educational institutions in the country is relevant and advanced.

****